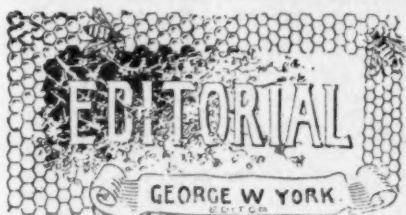


ESTABLISHED IN 1861 THE AMERICAN BEE PAPER IN AMERICA

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Secretary Benton, of the North American, has had some very neat letter-heads printed for the use of the officers in their correspondence relating to the association. Mr. Benton knows how to get up neat and tasty things. He is very painstaking in all his work.

October 16th, 17th and 18th, has been decided upon by the Executive Committee, as the time for holding the next annual convention of the North American Bee-Keepers' Association at St. Joseph, Mo. Better begin now to lay your plans to go. President Abbott wants to have an attendance equal to if not larger than that of last year at the Columbian meeting. Will you be there?

An Excursion and Picnic, under the auspices of the Philadelphia Bee-Keepers' Association, was held on Saturday, June 30th, at Woodcliff Apiary, near Jenkintown—Mr. W. A. Selser's queen-rearing establishment. It was a rare opportunity to see the manipulation of hives and methods of queen-rearing by the improved Doolittle scientific plan, Woodcliff being the only apiary of the kind in that part of the State.

Our Special Offer to Jan. 1st, on page 35, has attracted the attention of those who have not been too busy to solicit new names, and consequently they have sent in the subscriptions and secured their premiums as offered. Now, why cannot more of our present readers go to work and earn some of the many excellent books we offer as premiums? It is an easy way to get them—either the books or the new subscribers. Only 40 cents for the BEE JOURNAL from now to Jan. 1st, to new subscribers, and the one securing the new name or names, will receive a premium besides! Why not send in a lot of new subscribers this month, and thus help yourself and also your bee-keeping friends? See page 35 for particulars.

Many beginners make the mistake of thinking they can improve some of the standard hives or implements, and that before they have fairly learned the business.—Hutchinson.

Mr. C. O. Perrine, the man noted in time past as a honey-dealer, and who practiced migratory bee-keeping down the Mississippi river on a barge, is now a resident and land owner in Riverside, Calif.; and though the snows of many winters whiten his head, he is still an active business man. At present it is orange-orchards and not bees. So says Rambler, in *Gleanings*. We might add that Mr. Perrine once attempted to feed glucose to his bees, hoping to produce "honey" from it, and nearly ruined his whole apiary. The whole glucose business is no good for the beekeepers, and its use must be avoided and condemned by them at all times.

Profitable Bee-Keeping, as now contributed in lessons by Mrs. Atchley in the BEE JOURNAL, has been noticed in both *Gleanings* and the *Review*. The former paper says:

A series of lessons in practical apiculture for beginners, prepared by Mrs. Jennie Atchley, is now running in the AMERICAN BEE JOURNAL. So far as we have glanced over them, they are interesting and practical.

The *Review* for June contained this paragraph:

Mrs. Atchley, under the heading of "Profitable Bee-Keeping," is writing a series of interesting articles for the AMERICAN BEE JOURNAL.

Bro. Hasty, in a very brotherly way in the *Review*, hints to the editor of the *American Bee-Keeper* that the "brothering" business in the bee-papers in this country is all right. It was said in the May number of the *American Bee-Keeper* that the reason the editor objected to calling everybody "Brother," was that "the word often does not agree very well with the spirit manifested;" and that the foreign bee-papers were not given to the "brothering" mania. To which the "inimitable" Bro. Hasty replies: "To the (John Bull) dogs with those foreign papers in which they never say 'Brother.'"

The Apiculturist has a new printer, and the change, Bro. Alley says, caused the long delay of the May number of his paper. The *Apiculturist* is in its twelfth year, and seems to be holding its own as well as ever.

A Honey-Section Cover.—We have received a sample of manilla covers for sections. It is a sort of carton, but open on two edges. It was sent us by Mr. H. R. Wright, of Albany, N. Y., and is intended for use when marketing comb honey in the sections. It is fastened around the section with a single small tack.

Accompanying the sample carton, were these suggestions on preparing comb and extracted honey for shipment to the Albany, N. Y., market:

The best style of shipping-case holds five combs long and five combs wide, with honey exposed on only one side of the case. Glass one side of one comb, and put in the centre on the outside, showing the grade of

honey in the case. Weight, gross and tare, should be marked with pencil or small figures, keeping the case as free from marks as possible, for it never helps the sale of honey to have the bee-keeper's name on, and sometimes hinders the sale, especially on anything not perfect.

Extracted honey should be put in $\frac{1}{4}$ and $\frac{1}{2}$ barrels, and light color sold early in the season for best prices.

Mr. S. H. Clark, of Elwood, Iowa, was visited by the editor of the *Maquoketa* (Iowa) *Record*. Mr. Clark is the popular postmaster at Elwood, as well as a bee-keeping enthusiast. The editor of the *Record* said that Mr. Clark "could deliver a lecture on the subject, 'How to Make Bees Pay on the Farm.'" No doubt he could, and it would be a good one, too.

Honey-Dew and Its Cause.—A correspondent of the *Country Gentleman*, published in Albany, N. Y., recently asked about a "sticky, sweetish substance" found on the leaves of oak trees, to which the editor of that popular farm weekly replied as follows:

The sticky, sweetish substance on the leaves is commonly known as honey-dew. It is a secretion of various kinds of insects which suck the juices of plants. It is characteristic of various species of aphides or plant-lice, and this secretion appears, in some instances at least, to be especially abundant during dry, hot weather. A few years ago the elm trees along the streets of Albany were badly infested by plant-lice, and during a dry, hot time the secretions of honey-dew from these insects were so abundant that the sidewalks under the trees were defiled and blackened by it. The minute drops of the honey-dew, in a favorable light, could be seen apparently dropping from the trees above, but really coming from the insects.

In a recent visit to Lake Mohonk, the foliage of small trees and shrubs in many places there was seen to be wet and sticky with honey-dew. A little investigation revealed the fact that the branches of the trees above were infested by a species of scale insect. Though it was seen on several species of trees, it was especially abundant on oak and chestnut. In some instances the smaller branches were literally covered with the insects, whose broadly oval, convex bodies were in actual contact with each other. In every instance where the honey-dew was noticed on the herbage and shrubs, the insect, if sought, was seen on the branches of the trees above them. Where there were no scale insects, there was no honey-dew.

We do not put much faith in the statements sometimes made that honey-dew is a

direct secretion by the leaves, for we have never seen it where its connection with some insect could not be established.

We find in the honey-dew on some leaves a few threads and spores of some fungus. The fungus usually follows a copious secretion of honey-dew, on which it lives. Probably in a few days or weeks the leaves now besmeared with this substance will exhibit a dirty, blackish appearance, as if soiled with soot. This will be due to the development of the blackish threads of the fungus. The recently introduced pear-tree psylla secretes a kind of honey-dew on which a fungus develops. Accordingly, when we find the spurs and small branches of the pear tree presenting this sooty, blackish appearance, we may conclude that this pestilent insect is present.

A woolly plant-louse, inhabiting the alder and the beech, secretes such an abundance of honey-dew that a black fungus develops from it to such an extent as to form masses two or three inches broad, and sometimes almost as high.

Comb Foundation samples have been received at this office from W. J. Finch, Jr., of Springfield, Ill.—both thin and brood foundation. The latter is exceptionally fine, besides the side-walls are a trifle higher, we think, than any we have seen lately.

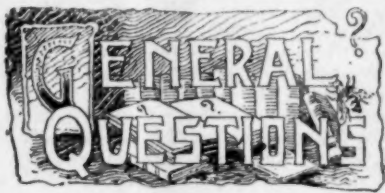
Practice What You Preach.—

An editorial found in the *American Bee-Keeper*, reads thus:

We wish our friends, and especially our fellow editors, would refer to us as the "*Am. Bee-Keeper*," not the *A. B. K.*, as there are the *A. B. J.*, *B. B. J.*, *C. B. J.*, and *N. B. K.*, and nine readers of every ten will confound *A. B. K.* with one of these if thus referred to. If the *Am. Bee-Keeper* contains anything worthy of repetition, please give us full credit for it.

That's good, Bro. *American*! But why can't you "take your own medicine," and give full credit to the *AMERICAN BEE JOURNAL* when you take anything from its columns, instead of crediting it to "*A. B. J.*," as in your June number? We substitute the name of our paper, and quote with emphasis your own words, as above, namely: "If the *AMERICAN BEE JOURNAL* contains anything worthy of repetition, please give us full credit for it!"

In other words, please "practice what you preach," and join the majority of editors who have long since ceased the meaningless "initializing" of other bee-papers when referring to them.



ANSWERED BY

DR. C. C. MILLER,
MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "*Queries and Replies*" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—Ed.

Drone-Traps—Queen Mating.

Do you think a queen-trap will keep my bees from swarming? Bees clustered on the inside and on the outside cannot get in or out. I have to take off and clean bees out. I have killed all my black drones out of hybrid colony. Will the queen mate with an Italian drone?

Sandwich, Ont.

J. L.

ANSWER.—No; bees will swarm just as soon through a drone-trap, but the queen cannot go, so you can have time to attend to them. The queen may mate with Italian drones, or with any others that are present. I suppose she is more likely to mate with drones from other hives than her own.

Moths in Frames—Queen-Cells.

1. How can moths be gotten out of frames of comb that are not in use? What is the best way to keep frames not in use, so as to avoid this trouble?

2. What would be the natural cause of a good-sized colony not having any queen-cells started at this time of the season?

3. If a colony is made queenless, how soon will they generally start queen-cells? and will they start queen-cells after introducing queen in July? If so, is it best to take them out? E. H. H.

St. Johnsbury Center, Vt., June 25.

ANSWERS.—1. I suppose you mean the larvæ of the moth or wax worms. With a penknife or wire-nail you can get out the large worms, if there are any. Then a good fumigating with sulphur will finish up the little fellows. A second fumigation in a couple of weeks may be

necessary, and if kept in a moth-tight place they are all right. Or they may do well, with occasional watching, by being put in a cool, airy place, the combs an inch or two apart.

The very best thing, however, both to get the worms out and to keep them out, is to give the combs into the care of the bees. Even a weak colony can take care of a good many combs. Put extra stories *under* the story containing the colony. A strong colony can have two or three stories under it, and two over it, but of course you couldn't have them working on sections at the same time. For extracting they would be all right. A colony having only two or three frames of brood can have two stories of combs under them. Italians make better work than blacks at keeping out worms.

2. A poor harvest, plenty of room, or a young queen would help to prevent preparations for swarming, but sometimes you may be so fortunate as to have a colony that doesn't seem to care about swarming when all others in the same condition are crazy to swarm. If you have a non-swarming strain of bees, you have a bonanza.

3. Queen-cells may be found within 24 hours after removal of the queen, but sometimes you may not find them until the third day. It is nothing very unusual for bees to start queen-cells after the introduction of a queen, and it looks a little ominous, but often no harm comes of it. I should rather have the cells destroyed.

Transferring and Italianizing.

Does Dr. Miller think I will make a success of the following operation?

I have a colony of black bees in a dovetailed hive with Hoffman frames. The colony is not strong enough to store any surplus if let alone. The bees have built their combs across the frames, fastening them all solidly together. I want to transfer and Italianize at the same time, and have an idea that the two things may be accomplished in the following manner:

First, make a one or two frame nucleus from another colony; give it an Italian queen, fill up the hive with frames of foundation, invert the hive containing the blacks, and set the hive with the nucleus on top of it, with queen-excluding zinc between. What will likely be the result?

E. B.

Leon, Iowa, June 25.

ANSWER.—The result may be all right with some modifications. You say noth-

ing about destroying the black queen in the crooked-building colony. If left where she is I should expect her to remain in possession, the queen of the nucleus being killed. Drum out the colony, kill the black queen, letting the bees return, then in a day or so you may find it safe to put the nucleus over the hive with excluder between. But I hardly see any need of turning the hive upside down.

For safety, I think I should allow the nucleus to have an entrance of its own, without obliging the bees to go down through the other hive, and I would have very little communication between the hives at first. Besides the excluder a heavy sheet of paper might be given, with room for only one bee to pass through, and the bees will gnaw it away in a few days.

If honey is yielding at the time, it will make it safer for the queen.

Swarming Questions.

1. What would be the result if I should give a swarm with a colony that had cast a swarm two days previous? Would they swarm out the next day, or be content with their new quarters and go to work?

2. I have a colony that cast a swarm on May 23rd. I examined them three weeks later, and could find no brood or sign of queen in the hive. The bees are working nicely, and filling up the brood-frames with honey. Would you give them another queen, or let them finish filling up with honey, and then give the bees to some other colony.

3. I hived a swarm in a new hive, placed an Alley trap at the entrance to prevent them leaving, and faced the old hive to the rear. This was about 10 o'clock a.m.; at 4 o'clock p.m., I discovered the bees leaving the hive quietly, crawling around to the entrance of the old hive and going in. In a short while all the bees had returned to the old home. I could not find the queen. What was the matter?

4. If late in the season a colony swarms, and I keep it from leaving the hive by means of a trap, would they gather surplus in the interval of swarming, or would it be better to let them swarm?

F. T. B.

Brookewood, Va., June 16.

ANSWERS.—1. They would probably stay content. This is one of the plans for preventing increase that has been spoken of with favor for years. But it

may be well to be prepared for occasional disappointments.

2. If you leave the bees till they fill up, and then unite, they will be so old they may not be worth uniting. Moreover, they will gather as much, or more, honey if united as where they are, so I would unite immediately unless the number is sufficient to make a fair colony by giving a queen. If you don't care for increase, it may be the best thing to unite.

3. It is not at all an unusual thing for a swarm to return to the old hive. In this case they did not swarm out in a body, because the distance was so short they could do better. Probably in most cases the reason for a swarm returning to the old stand is because of the queen. She may not be with them, or something may be wrong with her. Possibly they didn't like something about their new quarters.

4. The trap will not stop their working, but they'll not work so well while hindered in their plans. Whether best to let them swarm depends somewhat on your own convenience and your after management.

Queenless Colony—Laying Workers.

I have six colonies of bees, and but one of them has swarmed. It cast the first swarm on June 1st, and it did well for the first two weeks, and then had a little brood in the top edge of their combs. Yesterday, when I was looking through them, the brood was all gone, and the combs filled up with pollen. But the strange thing to me is, that they have two pieces of drone-comb built, some of the cells with two eggs in them, and some of them with one. What is the matter with them? Have they lost their queen? and are some of the workers laying?

One more strange freak is, they have now about a dozen queen-cells started on one frame. No. 2 came off June 9th, and it is doing well, and has as much comb built as No. 1, with quite a little brood in four of the frames.

Now comes something else: I thought that I would look through the old one that cast No. 1 and 2, and to my surprise I found the frames filled completely full of pollen, and very few cells of honey, with no brood or eggs of any kind. What is the matter with them? Have they lost their queen? What is the best thing to do with so much pollen?

This is a very bad year for honey around here. All the bees killed off all

their drones about three weeks ago, and there are few people that have had any swarms at all. The white clover is a complete failure, and if the bees get a living I will think that mine have done well.

G. R. M.

Rockford, Ill., June 25.

ANSWER.—You've hit it, first guess. Queen lost, then laying workers. The queen-cells only form part of the regular programme, for it is the usual thing to find the bees trying to rear queens from laying-worker brood. Sometimes the first intimation of laying workers is a queen-cell with two or more eggs in it.

As to the mother colony, it is just possible that the queen was slow about getting to work, but is laying all right by the time you get this. I'm afraid, however, that it is also queenless. If you find no queen laying by the time this reaches you, better not wait longer, but give the bees and combs of the queenless colonies to other colonies. Probably swarm No. 2 would be benefited to have some such addition.

The great amount of pollen in the combs comes from the fact that having no brood and young bees to use it up, the pollen has accumulated in the combs. It can be given to colonies that have a queen, giving only one such comb to each colony.

Perforated-Zinc Queen-Excluder, Etc.

Can Root's queen-excluder, or perforated zinc, be made $1\frac{1}{32}$ of an inch smaller, and still allow workers to pass through?

My reason for asking is that I have invented a self-hiver which I am confident will be a success, provided that the queen-excluder can be made smaller. In testing the excluder, I find that during the excitement of swarming, about one-third of the queens are crowded through, but that after re-hiving the bees, the queens cannot return into the hives through the zinc. In an out-apiary of 50 colonies I used the excluders to retain swarms, but about one-half of the queens escaped, thereby causing me to lose about one-half of the swarms.

I now have 380 colonies. I have produced from 5,000 to 6,000 pounds of comb honey. I cannot yet give accurate figures on extracted honey, because I am not done extracting. I propose to increase the number of colonies next year to about 800.

B. D.

Du Pont, Ga., June 25.

ANSWER.—I think Root's perforations

are about $1/6$ of an inch ; $1/32$ of an inch less would make them about a fifth less, and I doubt if workers would work through that size. From some experiments of my own, notwithstanding the belief that a sixth of an inch will hold all proper-sized queens, I'm afraid that any perforation that will hold at all times a queen crazy to get through, will be too small for workers to work through. Others, however, think differently, and they say my queens that got through must have been small. I hardly believe it.

OUR DOCTOR'S HINTS.

By F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Letter to Mrs. Brown.

DEAR MRS. BROWN:—Your very sensible letter is gladly received, and as a reply to your practical questions are likely to meet the requirements of other sisters in our "chat" circle, I think best to use our regular medium.

FELONS.—Yes, I quite agree with you that felons are pesky nuisances. They usually afflict people of tender skin and sensitive organization. One might feel a touch of pride in the suggestive aristocratic nature that they most likely visit, were it not for the intense pain these miserable felons give. Then, too, come to think, they are almost too easily acquired to make one feel importantly exclusive! Any little knock of one's hand, especially the thumb, against the sharp corner of a table, or prick with needle or pin, or a little sliver of wood or thorn in the end of a finger, is apt to set up that painful condition we call a "felon."

Many things have been used to arrest the progress of them—salt, soda, lye, pounded mullein leaves, scraped potato, etc.—but the best application I know of is to stick the finger into a bottle of tincture of iodine for a minute. Do this night and morning, and begin as soon as you hurt yourself. Don't wait until it begins to throb and hurt real hard, because then it shows that matter is beginning to form, and may be too late. But do it at once, and be on the safe side.

Persons who are predisposed to such ac-

cidents should keep, say a two-ounce wide-mouth bottle full, well corked, for emergencies. Its application does not hurt a particle—it simply turns the finger a dark brown. Two ounces will cost a quarter at your druggist, and will last a long time, besides being excellent for many kinds of bruises and swellings.

CONSTIPATION.—For that case of constipation you refer to, you can feel free to promise her a complete cure if she will drink a quart of hot water night and morning, and eat plenty of fruit—dried or fresh—especially apples, oranges and lemons, because most acid. But she must keep it up—regularly.

O, no! you are quite mistaken. You will be surprised to learn how easily one can learn to drink a quart of hot water—and that amount is necessary to flush the system. Less is useless.

SWELLING OF THE KNEES may be due to a variety of causes—but where there is absence of pain, the swelling is never serious in importance. What is termed among surgeons as "house-maid knee," is a swelling of the soft parts on each side of the knee, due, in their case, to scrubbing on their knees. Brisk friction of the parts with strong cold salt and water, night and morning, often dispels the swelling. If results are not satisfactory, try painting with tincture of iodine once or twice per week. That will be most certain to accomplish it.

SNAKE-BITE.—I suppose that snake-bite gave your good sister a terrible fright—but it was quite unnecessary. Garter snakes are no more poisonous than a kitten. O the pocketful I used to carry when a boy at school, to frighten the girls! But that was 40 years ago. Even rattle-snakes are not half as bad as the romancer goes on to tell.

APPENDICITIS.—You want to know what it is? Don't! It will only set you to thinking, and the more you think, the less you will know about the miserable fad that surgeons, who are always anxious to cut, would frighten you about. It is only within a dozen years that we have heard of such an accident as appendicitis—yet the world moved fairly well all the years previous. The surgeons have agitated the subject so much (to their interests), and so effectually scared (the rich in particular),

that as soon as they have a colic they begin to fear appendicitis!

But all this agitation is not without benefit, if it makes us sensible enough not to eat our fruit with large seeds whole, like pigs. You would naturally suppose that persons eating cherries, for instance, would reject the pits, but many don't. Nor is it safest to eat grapes with their many seeds, to get into the folds of the stomach and intestines, and there do mischief. But if people will so clearly contravene Nature's laws, willfully or ignorantly, they must take hazardous risks.

How often are blackberries given to babies for summer complaint—often with killing effect! Well, it isn't the fruit that does the evil, but the seeds they contain, which, coming on the inflamed mucous surface of the bowels, set up greater mischief, and the undertaker is called in. The blackberries are good, wholesome, and a fine remedy, if care is had to strain the seeds before giving—if *only* the clear juice is administered.

Are your questions answered? If so, good bye. Write again.

Convulsions.

"Yes, Doctor, I was holding him just this way in my arms, when his eyes became set in his head, his little hands clinched, thumbs inside, as you see him, with those big beads of sweat on his forehead, and so pale I thought him dead! I was going to give him some of this medicine, but thought best to send for you first."

Well, little mother, don't be too greatly alarmed. You did exactly right, first to send for advice without giving the medicine. Baby don't need dosing. You prepare a tub of warm water and put a tablespoonful of salt—just common salt—in it, and I'll do the rest. There, now, while the child is in the bath, let us look in its mouth. See how the warm water is relaxing the system?

Ah, there is the difficulty. See how bluish and swollen that gum is, where the eye-tooth is trying to come through. Well—there! just that little bit of cutting of the gum relieves the tension and—see? There's your baby almost ready to smile at you! Keep its feet and stomach warm; feed him a few spoonfuls of warm water now and then, and nurse him very lightly; by to-morrow he'll be crowing like a little rooster!



CONDUCTED BY

MRS. JENNIE ATCHLEY.

BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 6.

(Continued from page 15.)

DISEASES OF BEES.

We will suppose now that two more months have gone by, and this is Sept. 1st, and Harry has heard now that this school has its name up as foul brood inspectors, and he wishes us to go over and examine his apiary. So let us go over, for I hear his bees are nearly all dead, and he has no honey this year. He bought his bees last year from Mr. Jones, and somebody said that Jones lost all his bees with foul brood. I sent Harry word that we would be over to-day, and he will be anxiously awaiting us.

My! how solitary things look around here. Just look at the hives all turned up and stacked about in little groups. I am scared already.

"Good morning, Harry. The foul brood inspectors are upon you right now. Get your smoker, and let us see quick."

"Well, I tell you," says Harry, "we won't have much need of a smoker, as I have nothing much to smoke. But here, we will open this hive—I see some bees here yet."

"My! close it up. Foul brood in its worst form!"

"How do you know?" says Harry.

"Can't you smell that double dead odor—very sickening?"

"Now," says Harry, "just show us all about this awful disease right here, where we may all see with our own eyes."

"All right; I will do what I can to make it all plain to you, though I am a poor hand to explain things, but will take time and pains enough to show you all what foul brood is, and how you may

all know hereafter when your bees have foul brood.

"Now, all circle around this hive, and I will lay this rotten comb down on the cover, and show you what I can. You see this is a bad case—foul brood in a malignant form. It has been in this apiary a year or more. Now, right here, in the center of this comb, is where it started, as you see this rotten, offensive mass. This disease was brought here likely when Harry bought his bees from neighbor Jones, and it began in hive after hive in the center of the combs, and spread like this one until you see there is only a very few cells hatching around the edges, and soon none will hatch at all, and they are gone forever.

"Now look at this rosy substance. See how it stretches; and see these sunken cells with a little pin-hole through the caps of the cells. These holes have been made by the bees, thinking to remove it, but when the cell was punctured, the sickening or disgusting smell caused the scavenger to back out from her job, and thus it goes on. Or the small hole may be caused by explosion, as the air-tight, or almost air-tight, cell may become so crowded with gas that a small hole in the weakest part of the cap (which is the center, as it is farthest from any supporting wall)—I am not going to say just what makes those little holes, but one of these ways seems most likely to be right. But we will pass on by *knowing* the hole is there, for we see it, as it is the things we *know* that we wish to teach.

"This dread disease is like yellow fever, or any other catching disease. It will take hold of its victim at once when properly exposed.

"Now, I will try to show you why dead brood does not produce foul brood."

"Yes, all right; that's what we are anxious to hear."

"First, let me give you the points I wish to make. We have *always* had dead brood, and we have not always had foul brood; as I know I can remember hearing father talk about dead brood, and I never heard of foul brood until after bees were imported to our American shores from distant lands.

"Next, foul brood is a walking or flying 'roaring lion,' blood-thirsty, and kills live brood, not caring anything about dead brood, nor would it ever spread an inch if dead brood was its only show. Its germs will no doubt live in dead brood awhile, but before it can start, or make one single bit of progress, it *must* have *live, fresh* blood to devour. It is the same with small-pox.

What would you think of me, if I should say that dead body yonder will start small-pox? Why, you would likely say I was foolish, as you say small-pox travels through the living, and kills the living, and cares *nothing* for the dead, more than its germs will take hold of a live being, if such is exposed before the germs all die. But *never* will it hunt for another dead body to start again. It is the same way with foul brood. A common air-germ looks after a dead body to start and thrive, and will *not* take hold of decaying matter in freezing weather, nor will a dead substance decay until it is warm enough for air-germs to grow. I believe freezing will also stop the germs of foul brood. But I am not yet able to say that freezing will kill a foul-brood germ, but I know cold weather will check it, the same as common air-germs.

"Now, have I made it plain to you that foul brood does *not* start from dead brood? Well, I will rehearse to you that foul brood has no such a germ as a common air-germ, nor is there any common air-germ that has any part of a foul brood germ about it, as the two are as different as day and night; and to close this lesson on foul brood, I will say that I will endeavor to give you its cure in a future lesson, if I can."

The next lesson will be on Bee-Paralysis or the "Nameless Bee-Disease." Then, before we get through with Diseases of Bees, we will take up everything known as a disease, and treat it as clearly as we can. While I have not seen a real case of foul brood for ten years, aside from specimens sent me, I had a four years' siege of it, and lost 100 colonies of bees by it, and I tell you I learned something about it. I will add right here, that I am firmly convinced, by what I have read about foul brood lately, that it is of a much milder type than it used to be. It is said that the longer a catching disease runs, the lighter it gets. So foul brood may, and I trust will, play out ere long, and be remembered only in the past.

JENNIE ATCHLEY.

(To be continued.)

Weak Colonies—Greenish Pollen.

MRS. ATCHLEY :—Will you please tell us through the AMERICAN BEE JOURNAL, in your department, how to manage weak colonies, as I always read that part first. I notice what Doolittle has

to say about this on page 628. Is your plan the same, or would you make further suggestions?

I see my bees are gathering a greenish pollen. What do you think they get it from? Allow me to express my gratitude for your lessons in bee-keeping we get in the "Old Reliable."

D. BACHMAN.

Grand Prairie, Tex., June 14.

Brother Bachman, I will do the best I can in answering your questions. I have read Doolittle's article you mention, as well as all others he writes that I get hold of, for he is one of our *safest* guides leading out on the long road of apiculture. But as I cannot now remember exactly his words, nor have I time to turn and re-read at present, I will add that where a colony is weak there is a cause for it. To remedy the matter, remove the cause. If your colony has become weak from lack of stores, feed them, and give them a good start off. If they have become weak by a bad queen, move her, and give them a good one. If they are too low to build up rapidly, give a frame or two of hatching brood from other colonies. Watch your honey-plants, and during a scarcity of honey be sure to feed enough to keep them building up, and as soon as honey appears in the fields, you will see them build up very quickly.

Now, to build up a colony of bees rapidly (and this is the way we usually like to do it), give them a good queen, plenty of food, and bees enough to stay at home and do the house-work, and keep the nest warm to hatch the eggs, and some to spare to work. This, I think, will cover the whole ground of the management of weak colonies. I might stretch out and write a long article on every point that touches upon the management of weak colonies, but I think it unnecessary, as I am sure that if you will follow Doolittle, and heed my remarks above, you have a good plan for building up weak colonies.

In regard to your greenish pollen, I will say that many years ago I kept a large apiary in the valley just about two miles south of your apiary, and I noticed this same greenish pollen. I noticed the bees working on the blooms of a little running vine that grows there, and is now in bloom. Its blossoms resemble a small snow-ball flower, only they are a little reddish hue. If the greenish pollen does not come from this source, I do not know where it comes from.

I am glad indeed that you appreciate


my writings. I receive many congratulations from all over the country, and it helps me to brace up, and makes my pencil feel lighter when I read them. I feel proud to know that I am able to help some bee-keepers, even if I have a poor, awkward way of explaining what little I know about bees.

JENNIE ATCHLEY.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.
 July 19.—Carolina, at Charlotte, N. C.
 A. L. Beach, Sec., Steel Creek, N. C.
 Aug. 1.—Central California, at Hanford, Calif.
 J. F. Flory, Sec., Lemoore, Calif.
 Aug. 16.—East Tennessee, at Whitesburg, Tenn.
 H. F. Coleman, Sec., Sneedville, Tenn.
 Oct. 16-18.—North American, St. Joseph, Mo.
 Frank Benton, Sec., Washington, D. C.
 1895.
 Jan. 28.—Venango Co., at Franklin, Pa.
 C. S. Pizer, Sec., Franklin, Pa.
 Feb. 8, 9.—Wisconsin, at Madison, Wis.
 J. W. Vance, Cor. Sec., Madison, Wis.

 In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

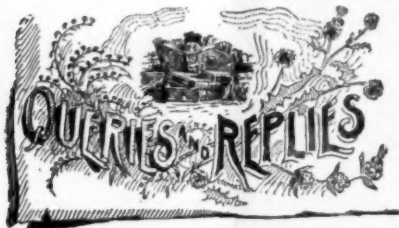
PRES.—Emerson T. Abbott....St. Joseph, Mo.
 VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
 SECRETARY—Frank Benton, Washington, D. C.
 TREASURER—George W. York....Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
 GEN'L MANAGER—T. G. Newman, Chicago, Ill.
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May-Flowers and Mistletoe is the suggestive name of a book of over 250 pages containing selections of poetry and prose for all seasons, for older boys and girls, from the best writers of the day, with dialogues, motion songs, and drill exercises for smaller children. It is suitable for rhetorical exercises in the school and entertainments given by church, library and benevolent societies. Beautifully illustrated, and each poem or selection set in a colored border. Cloth-bound; size, 8x10 inches; price, postpaid, only \$1.00. Clubbed with the BEE JOURNAL for one year—both for \$1.75; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year.

Great Premiums on page 35!



Covering for Sections on the Hive.

Query 931.—1. Which is best as cover for sections, enameled cloth, small strips of glass laid over the openings, or a quarter inch bee-space cover?

2. Why?—J. W. S.

I use wide frames.—G. M. DOOLITTLE.

I use heavy Indian head muslin.—MRS. L. HARRISON.

1. The last. 2. It will leave sections cleanest.—C. C. MILLER.

1. I don't know. Ideas and conditions vary.—J. M. HAMBAUGH.

We would use almost anything except the $\frac{1}{4}$ inch bee-space cover.—DADANT & SON.

I use our regular solid honey-board laid flat on top of the sections.—E. FRANCE.

1. Enameled cloth. 2. It is more easily adjusted, and more easily removed without disturbing bees.—JAS. A. STONE.

1. The cover with $\frac{1}{4}$ inch bee-space. 2. Less work and less daubing.—S. I. FREEBORN.

1. I prefer the latter. 2. It is more convenient, and I think just as good.—A. J. COOK.

1. Enameled cloth. 2. It keeps the sections clean, and is convenient.—P. H. ELWOOD.

I prefer a thin board with bee-space, but I use a cloth, mostly because the latter is cheapest.—G. W. DEMAREE.

1. A board, a bee-space above the sections. 2. Because it is less trouble, and causes less propolization.—J. A. GREEN.

1. I like a quilt or cloth. 2. Because it is always easily removed. I do not like glass or any hard covering.—MRS. JENNIE ATCHLEY.

1. There is no difference. 2. A bit of shingle is as good as either. I would rather not have a bee-space over the sections.—M. MAHIN.

1. I prefer a cover bee-space from the sections. 2. Because it is easier to examine the sections, and in storifying the supers.—G. L. TINKER.

1 and 2. I prefer enameled cloth, as it is cheap, easy to handle, and answers the purpose better than anything else I know of.—W. M. BARNUM.

1. A flat board cover with bee-space over the sections. 2. Less propolis, less fussing, greater ease and rapidity of manipulation.—EUGENE SECOR.

1. A bee-space between the cover and sections. 2. Because then there is less work, fewer "traps," and less propolis on the sections.—R. L. TAYLOR.

1. Enameled cloth. 2. It lies close to the sections, and prevents bees from coloring the tops, and also is not propolized like anything else.—J. H. LARABEE.

1. I very decidedly prefer the bee-space cover. Your sections, however, should be protected in some way from the travel of the bees on top.—C. H. DIBBERN.

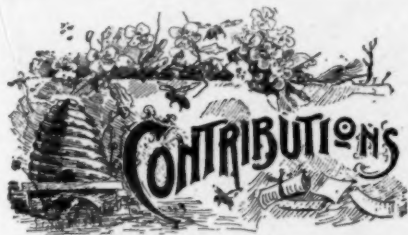
1 and 2. I prefer a white cloth of heavy twilled goods. Thin boards make a good cover, but much harder to remove than the cloth. I don't use enameled cloth.—J. P. H. BROWN.

1 and 2. I don't think either is best, or that there would be any choice. I should prefer something porous, that would allow excess of moisture to escape, while retaining the heat. I assume the question refers to winter coverings.—J. E. POND.

1 and 2. I have used the enameled cloth with good results, also the $\frac{5}{16}$ space between the sections and cover. I can see no difference, except with the cloth the sections are cleaner, provided you keep the cloth down smooth over the sections.—H. D. CUTTING.

1. Cloth. 2. Because it can be rolled back gently, without any cracking or snapping; it fills the crack which would give a draft between the super and cover; prevents the same from being stuck down with propolis, and keeps the tops of the sections from becoming stained.—MRS. J. N. HEATER.

1. A cover with a $\frac{1}{4}$ -inch bee-space. 2. Because the bees will not soil the sections as much as they will if the cover fits flat down on the sections. There is a better chance for ventilation, and it will not be so hot in the super during very warm weather. The cover costs less, and is more convenient every way.—EMERSON T. ABBOTT.



Bees Moving Eggs—Carni-Italians.

Written for the American Bee Journal

BY EMERSON T. ABBOTT,

President of the North American Bee-Keepers' Association.

Willie Atchley has a long article on this subject in *Gleanings*, in which he claims that bees never move eggs. The editor says he would like to hear from the queen-breeders, especially Doolittle.

Now, I am not a queen-breeder, neither is my name Doolittle, but I think I have positive proof that bees *have* moved eggs. I am not prepared to say that they make a business of it, but the presumption is that what they have done *once*, they can and will do again.

Several years ago in Dutchess county, N. Y., I obtained a lot of black bees in the fall from farmers who wanted the honey, but intended to kill the bees. I put these bees on foundation, and fed them enough sugar syrup to take them through the winter. As they were all black bees, I introduced Italian queens as soon as I could. The black queen of one of these colonies was killed in some way in making the transfer; and, as soon as they began to draw out the foundation, I saw that they had no queen, and were building queen-cells. There was not an egg of any kind to be found in the hive.

Happening about that time to be in the apiary of a near neighbor who had Italians, I saw one of his weak colonies come out of the hive and leave for the woods. I went to the hive and found a number of small, white, new combs, but no honey. On examining these combs closely, I found that two or three of them were full of eggs. To try an experiment I took two of these combs home and put them in the outside frames of the hive that contained the bees which had neither queen, brood nor eggs.

In three or four days I took the combs out to examine them, and saw that every

egg was removed from the cells. On further examination I found a lot of eggs in the center of the hive, and a cluster of bees around them. I also found a queen-cell with a larva in it. This was a new experience to me, and I concluded I must have overlooked the black queen, and she had now begun to lay, but I could not account for the disappearance of the eggs which I had put in the hive. There was no way to solve the problem but to await developments, and I did so.

To make a long story short, in due time the bees had an Italian queen, and every one of the remaining eggs hatched an Italian bee. Where did they come from, if bees never move eggs?

CARNIOLAN HYBRID BEES.

In the same number of *Gleanings* the editor, in speaking of Carniolans crossed with Italians, says:

"Possibly a cross would be desirable, but how are we to distinguish them from ordinary hybrids?"

In reply to this I would say they can be distinguished in the same way that we distinguish black bees from Italians. The progeny of a Carniolan queen mated with an Italian drone does not resemble the bee produced by a cross of the Italians with the blacks, any more than a black bee does an Italian.

In 1886 the writer published a little book in which he said:

"A Carniolan queen mated with an Italian drone produces a very fine and desirable bee. We have a number of such colonies that are very fine workers, and easy to manipulate. Not quite so gentle, perhaps, as the pure bred, but a single puff of smoke sends them down on the combs where they will remain quiet."

More: I want to say that by breeding out the silver-gray color, in a few generations we would have a bee which would show no trace of the gray blood which is found in the Carniolans. I have never seen but one Carniolan queen whose progeny did not show yellow bands, and I have seen a great many Carniolan queens which came direct from Carniola, through Mr. Benton. I want to say further, that pure Carniolan bees bear no resemblance to the blacks.

St. Joseph, Mo.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for \$1.40.

Remedies for the Nameless Bee-Disease.

Written for the American Bee Journal

BY C. THEILMANN.

If that perplexing "nameless bee-disease" can be cured with sulphur, then the Australian bee-keeper spoken of on page 775, will be a great benefactor to the bee-fraternity, as the cure is cheap and simple, and probably just the remedy.

I have been studying on this disease considerable for the past six or eight years, and tried a great many remedies, but failed in all except one, and that is by taking frames of brood and bees from other colonies and exchanging them with the affected colonies. But in bad cases it would take three or four, and sometimes five, frames before they were cured. I give the frames at intervals of from five to eight days, generally two frames the first time, and one after until cured.

From the nature and actions of the diseased bees, I have always thought it was either a parasite or fungus, upon which I have heretofore expressed myself in the BEE JOURNAL. Knowing that sulphur is a good remedy for such things, yet it never occurred to me to try it.

To exchange queens, as some have recommended, has always failed with me. Salt and rain water has cured many colonies that were only slightly affected, but in bad cases it would do no good, and the frame remedy was the only thing I have ever tried that would effect a cure every time; and the frames exchanged have no bad effect on the healthy colonies, but sulphur, in the way described, would be preferable.

After seeing the remedy in the BEE JOURNAL, I went to the apiary and applied the sulphur on two colonies which were slightly affected (the only ones that were diseased). I sprinkled the frames of one, which quieted the bees immediately. I sprinkled the other at the entrance, which made them furious, and many of them killed each other for a minute or two, and then quieted down. I will report results on the disease hereafter, as it is too early yet.

My observation of the origin of the disease leads me to believe that the bees get it from the plants they visit, the same as other stock (cattle and horses) get the so-called scabs from the plants they come in contact with. Here would be something to study for the experiment stations, that would be of much interest to our industry,

My bees are living from hand to mouth. They work on the plan of the little poetry that I saw in the BEE JOURNAL lately—they scratch and bite, and gather honey all the day, and eat it up at night. They get just enough for brood-rearing. They are overflowing with bees, but I have not as yet (June 23rd) seen one particle of new wax in the hives anywhere, and consequently I have put no supers on any of them.

Linden will open in a few days. It looks promising.

Theilmanton, Minn.

A Home in the Sunny Southland.

Written for the American Bee Journal

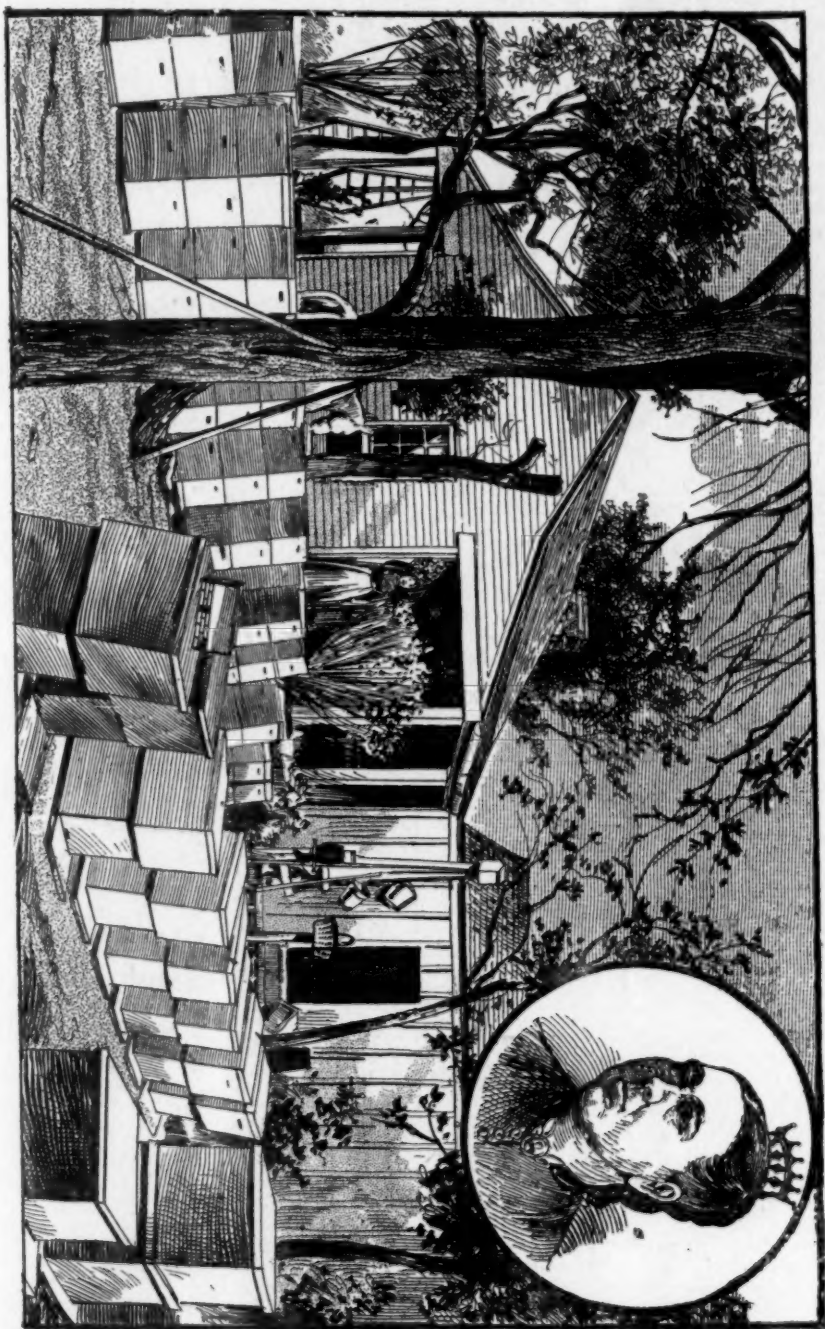
BY MRS. S. E. SHERMAN.

The illustration on the next page gives some idea of my apiary, though considerably less than half the hives show in the picture. The house is larger and much better than it appears. It was a box house, and when I got the place I had the strips torn off and weather-boarded on the outside, and celled on the inside, making it a very comfortable house. The kitchen and dining room, which are one, is celled overhead, then canvased and papered. All the floors are carpeted except the galleries and honey-room, which are painted.

This engraving was made from a photograph taken on Dec. 28, 1888. The engraver lengthened out the cut and added those clumsy boxes, or as I suppose he thought, hives in the right corner; also the dining-room is lengthened out. The door is in the center, and not near one end, as he has it. This was perhaps done to make room for my photograph. If you will notice, he has no entrances for the hives—maybe he did this on purpose to shut the bees in to keep from stinging me while on my high perch. I am naturally dizzy-headed, and should the bees sting me while up so high, I might come down with a great fall.

I have six yards, or breeding pens, as they are generally called, for my fine chickens, all of which are arranged so that I can feed the chickens in each and every pen without going outside the house at all. This is very convenient, especially during bad weather.

A large tank cistern stands at the corner of the dining-room, and just to the right of it is the bee-tent. South of the tent and dining-room are two double rows of bee-hives, 7 feet apart, facing



The Home and Apiary of Mrs. Sallie E. Sherman, at Salado, Bell Co., Texas.

each other, then 14 feet apart, and the other two rows facing each other, so I can see every hive from the back gallery and dining-room, also from the south bed-room.

Going south through the main street is a gate which leads into the cow shed, barn, stable, etc. North of the house is a nice little orchard of 40 fruit trees. At the east end of the orchard is the large hen-house for the outside chickens. Both east and west of the house, etc., is a nice little pasture—on the west is Johnson grass, and on the east millet. I will have the Johnson grass cut the second time now in a few days.

I have taken 2,200 pounds of extracted honey to date (June 25), this season, with fair prospect of more to follow soon, and good prospect for a fall flow.

We have four churches in Salado, and two splendid schools that can't be surpassed in Texas.

It is a healthy location, with plenty of water the driest years that we ever have. There are everlasting springs bursting up all along the side of the creek.

My place is in a beautiful grove of live-oaks and elms. It is also off from the street, which makes it much more desirable for an apiary. There are two acres of ground between the apiary and street.

Getting the Most Surplus Honey.

Written for the American Bee Journal

BY JOS. E. POND.

How can we get the most surplus in a given season?

The above query is simple, and easily answered, if one takes into consideration the fact that answers must not be applied locally, but generally. Localities vary in their conditions as do seasons, and we must apply our information to the location and the climate in which we keep our bees.

Generally speaking, however, the rule is strict, that we must have forager bees, and plenty of them, at and during the nectar-yielding season. To determine this, we must know the flora of our locality; for knowing this, we shall know how to get ready for our honey crop.

We will start, then, with the fact that it is practically 21 days from the egg to the bee emerging from the cell. Early in the season we must give these young bees 15 days or so, ere they become

foragers; but during this time they are not idle, by any means; they do the nursing and the home-work until they become able to forage advantageously.

With the above factors, and the added factor, that if the queen "is any good," brood-rearing is constantly going forward, the problem is easily solved, theoretically; Experience will teach us the rest, and if we follow her teachings as we ought, we shall have no trouble in getting our honey crop, if there is any nectar to gather.

To sum up, the rule is this: Know where there is nectar to be gathered, and have your foragers, and plenty of them, to go for it. To be sure, it requires common-sense, diligence and knowledge, to bring about the required result. But so it does to be successful in any pursuit in life; and be sure of one thing, don't ask "A," who lives in "Alaska," when nectar is ready to be gathered in his locality, and apply the answer to your own surroundings; but study your own field in those respects, and work your bees in accordance with the knowledge thus gained. Thus shall your hives be stored with honey, and your bees wax fat and vigorous.

North Attleboro, Mass., June 22.

Visiting in Iowa—Honey Prospects, Etc.

Written for the American Bee Journal

BY W. C. NUTT.

On May 18th I started on a trip to Hardin and Grundy counties, Iowa. I stopped over Sunday with Mr. O. B. Barrows, ex-mayor of Marshalltown. (He was mayor from 1874 to 1877). He keeps about 100 colonies of bees, almost in the heart of the city. Mr. Barrows is an enthusiast in the profession. He produces comb honey.

While mayor of the city, the extensive water-works, of which the people of Marshalltown may well be proud, were put in. We visited several places of interest, consisting of the water-works, cemetery, glucose factory, soldiers' home, etc. Iowa may well feel proud of her home for the soldiers.

Mr. Barrows informs me that the glucose works consume from 3,000 to 5,000 bushels of corn every 24 hours. Where does all of the glucose go? Echo answer, "Where?"

My stay with Mr. and Mrs. Barrows was a pleasant one.

Monday morning found me on my way to Hardin county. At Eldora I visited

Mr. J. E. Hand. I staid there from noon to eve of the next day.

Mr. Hand has three apiaries—one about 9 miles north, on the Iowa river, a small one at home, and a very fine one about 7 miles southwest of town. We visited the latter apiary in the afternoon. It consists of 76 colonies, mostly in chaff hives, and mostly Italians. They were in excellent condition, and very docile, as we went among them without any protection. There was at the time a dearth of honey, on account of the drouth, and I got but one sting on the finger.

Mr. H.'s home apiary he intends devoting to queen-rearing. He seemed to take great pleasure in showing me a \$10 queen. Her bees are beauties.

The next day we visited Mr. Hand's apiary north of town, going by the way of Steamboat Rock, so named from a large perpendicular rock on the Iowa river at that place, which to the imaginative mind may look some like a steamboat, but it was no "sight" to Mr. Hand, he having spent from January to April in California.

At Steamboat Rock we visited Dr. Caldwell's apiary, consisting of 86 colonies. He uses the 8-frame hive. I think that he has about the nicest bees I ever saw. The Doctor was not at home, but Mrs. Caldwell seems to be a lover of the bees, and I understand she cares for them mostly herself.

Mr. Hand's apiary north of town is a house-apiary. He thinks he is going to like it, but it has its objections, as we found out to our sorrow. It was locked, and the windows fastened down. On putting his hand in his pocket for the key, he found that he had left it at home—not a very pleasant finding out, after we had come 9 miles through the hot sun and dust, to see the inside of that house. But the bees spoke for themselves from the outside. They were blacks, and were awfully cross. But we had to content ourselves by going up on the hill, and looking at a 40-acre patch of young basswood, which Mr. H. reserved when he sold his farm.

After dinner (at Eldora) we visited the Industrial School for boys. There are at present 447 boys there, that are well cared for, and seem contented. If more of our boys were cared for in the same way, I think that we would have fewer tramps. There are 1,000 acres of land belonging to the institution.

My stay with Mr. and Mrs. Hand was one I will look back to with pleasure.

In Grundy county I visited Mr. Roney

and Mr. Stubbs. I staid all night at the latter place. I think that each has about 25 colonies of bees. They do not make the bee-business a specialty. Each has large farms that are much more profitable to them.

I arrived home on Friday, June 1st, having spent two quite pleasant weeks at both business and pleasure.

I have two apiaries containing about 40 and 60 colonies respectively—one on the north and the other on south of Skunk river. Both apiaries are in splendid localities for basswood, which is blooming, I think, as full as I ever saw it; but it has begun to rain, and I am afraid that it will spoil our crop of honey from that source.

White clover was a failure on account of the drouth. If basswood fails us, prospects will be discouraging, indeed. Basswood began to bloom about June 21st.

Lynnville, Iowa, June 25.

Stimulative Feeding of Bees.

Written for the American Bee Journal

BY C. E. MEAD.

I have tried it for the past three seasons, and it has been a positive loss. It excites the bees, and they fly out in our changeable weather, and get chilled and never get back. I fed in 1892 some extra strong colonies that I feared were short of stores, and I could not unpack them as the season was cold. Smaller colonies with plenty of honey beat them badly.

In 1893 I fed to prevent starving, as we had cold, rainy northeast winds from May 10th to July 4th. My bees were no stronger July 4th than May 10th, with no field bees, and not more than two pounds of honey to the hive. They did not increase in weight till July 16th, as all of the old bees were caught in rains and killed.

This year I fed two colonies that I felt a little uneasy about, and as we have had changeable weather since, they are weaker in bees and honey than they were when I fed them. The colonies that were not fed, and are strong in honey, are the best. I have only unpacked a few of my bees so as to clip the queens' wings; $\frac{1}{2}$ have queen-cells started, and some are capped over. Four nuclei are even stronger than the full colonies were last year. My experience runs thus:

Have from 30 to 40 pounds of honey

in the hives on Sept. 30th; if not, feed. Give full-sized entrance, no upward ventilation; pack them as warmly as you can on the summer stands, contract the entrance in April so as to make them uncomfortably warm, and do not feed them unless to prevent starvation. Let them alone till you put on the surplus receptacles.

Chicago, Ill., May 26.



Central California Convention.

Written for the American Bee Journal

BY J. F. FLORY.

The first quarterly meeting of the Central California Bee-Keepers' Association was held at the City Hall, in Hanford, Calif., on June 6th. On account of the rain the day before, and the threatening aspect on the day of the meeting, only a few were present.

Neither President nor Vice-President being present, Mr. C. F. Flory was called to the chair. The minutes of the last meeting were read, corrected, and approved.

SHAKING PALSY.

Mr. J. F. Bolden, of Tulare, had used the 30 drops of carbolic acid to a gallon of honey, as recommended at our last meeting, pouring the honey in the hive in the evening, tipping the hive back, to prevent running out. He also sprinkled powdered sulphur on top of the frames of the others. Both plans seemed to prove effectual, and it is to be hoped that others will try the sulphur cure and report.

SWARMING.

Which is considered the better, natural or artificial swarming?

It was pretty generally admitted that where bees swarm on time and enough, it is best to let them do so; but if not, and increase is wanted, increase by dividing should be resorted to.

Which is the more profitable, to divide your colonies, or buy them at \$1.00 per

swarm, the purchaser furnishing the hive?

This was answered thus: Where the most of our honey comes during the middle, or latter part of the season, it is best to divide them, as they could be built up strong until then; but if the most of the honey-flow came during and after swarming-time, perhaps it might pay best to buy them.

HONEY RESOURCES.

It was generally agreed that alfalfa is the leading honey-plant in this valley; that camphor-weeds frequently furnished a good flow of fine honey, and that the alkali and other weeds and wild flowers frequently furnish considerable honey of a less favorable grade.

SPECIAL MEETING.

There seemed to be a universal feeling that we should have a special meeting between this and our next quarterly meeting, on the first Wednesday in September, to consider the question, How to best dispose of our honey? Those that sold for cash f. o. b. were generally satisfied, but many of the consignments were unsatisfactory. Parties shipping 400 cases of comb honey, and others of a less number, have no returns. Quite a feeling prevailed against those

COMMISSION-MEN

doing business in that way. And right here is where one of the great advantages of our social gatherings come in. The men that deal either fair or unfair are prominently brought to public notice.

It was decided to have our special meeting on the first Wednesday in August, at Hanford.

QUEEN-REARING.

Mr. Orr thought the Doolittle method was perhaps the best, although he had never tried it.

Mr. Stearns put several frames of just-hatching eggs into an empty hive with a goodly number of young bees, and then removed a colony to another place, and put the new colony in its place, and thus secured his queens.

The Secretary uses a modification of the Doolittle plan, and got queen-cells anywhere and in any way he could. He cuts them out, and by means of melted wax, sticks them on what he calls a "slide," and puts in a frame holding from 16 to 24 slides with cells, and removes the larvæ in the cells, and then transfers into them larvæ from select

stock. He has practiced the transferring process for 33 years, and thinks more highly of it than ever.

BEE-HIVES.

The size and style of hives elicited quite a discussion, as quite a variety of hives are used. Messrs. Orr and Stearns, of Salem, both large honey-producers, have used both the 8 and 10 Langstroth frame hive, but decidedly favor the 10-frame.

Mr. Gilstrap used a 10-frame hive, two inches shorter than the Langstroth frame, but if commencing again he would use the regular Langstroth frame. The Secretary used a 10-frame hive, the frame being 6x15 inches in the clear, and he preferred them, for many reasons given.

LAYING WORKERS.

The most effectual plan given was to remove the colony some distance from its stand; shake all the bees on the ground, replace the frames in the hive, and return them to their original place. This remedy was reported as effectual.

On motion, it was decided to adjourn until the first Wednesday in August.

A special request is extended to all to bring with them samples of honey, beeswax, hives, honey-boards, queen-nurseries, cell-protectors, sun wax-extractors, and any and everything of value or curiosity to the fraternity or visitors.

J. F. FLORY, Sec.



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Spends His Time in the Apiary.

As I spend most of my time in the apiary now, I find the BEE JOURNAL indispensable. At present I have 46 colonies, spring count.

A friend and I visited Mr. B. Taylor's apiary, at Forestville, Minn., the past spring. We were much pleased with Mr. Taylor, and felt well repaid for the drive of 15 miles, having gathered a store of valuable information.

T. J. RICHARDS.

Lime Springs, Iowa, June 29.

Gathering Honey—Catching Drones.

My bees wintered fairly well, and built up nicely until it commenced to rain so much, and that put a stop on them for nearly a month, but they are in good condition now for business, and are at it, both in swarming and gathering honey. I have had 17 swarms to date, with 20 colonies, spring count. I am putting second swarms back.

I have a new way to catch drones. I reverse the drone-trap with a cone small at one end to let them out of the hive, and you will catch them from all the hives in the yard. They hear them, and come there to get in, and of course they do. Perhaps others have done the same, but I have not seen it in the papers I read, so I mention it. Let others try it, and see how soon they will get a trap full.

CHARLES TAREY.

Houghton, N. Y., July 1.

Basswood Honey.

My bees have been to work on basswood for the last five or six days, and they have filled the hives full. It is the first basswood honey in ten years.

R. MILLER.

Compton, Ill., June 30.

Best Year for Bees.

The AMERICAN BEE JOURNAL comes promptly every week, and it is a source of great pleasure for me to peruse its pages. I am in the bee-business more for pleasure than for profit, but I am getting more pleasure this year than I bargained for. I have 35 colonies, and they keep me whooping up to keep up with them, and do such other work as I have to do. I have one colony that I have extracted 112 pounds from, and there is about 50 pounds that is nearly ready to come off (hence the pleasure). This is the best year for bees that I ever saw, and if it continues seasonable, it will be equal to California.

S. F. OZBURN.

Meridian, Tex., June 25.

Making and Wearing a Bee-Veil.

Having read with interest the ways of making and wearing a bee-veil, I feel called upon to add my experience. As I was reading Miss Wilson's article about veils, I thought she might have struck the same plan that I did, but she didn't. This veil gives me perfect satisfaction. I find a bee-veil to be a very handy thing, and the most surprising thing is the amount of courage it will add to the wearer. I tried to work one day this spring without a veil (before I made one), and one bee took her spite out on my eyelid, and that eyelid received much sympathy. All the rest of the face was in sympathy with it for about three days. So you may know why I wear a veil.

Now for the veil: If you don't understand all, just guess at the rest. Get a strip of mosquito-bar (depending upon how

big and long you want it), and sew the ends together to make it circular in form. Hem both ends with a broad hem. Get a common straw-hat (white), with a broad brim. Take now a piece of hat ribbon or rubber cord, and cut it to draw tightly around the crown of the hat. Put this cord in the hem, as you would run a draw-string. It will then bind to the crown of the hat, and project over the rim.

Now, through the hem of the lower side of the veil run a rubber cord the same way. Have this cord a certain length, or just long enough to hang loosely around the neck, and lop a little over the shoulders. Get a couple of shoe-strings (any string will do), and cut in halves; tie a half string to this lower cord just so one string will hang before and one behind each shoulder. Now tie these strings middling tight, and the rubber cord (if the right length) will run over the tops of the shoulders and down a little piece, and then straight across the breast and back. This boundary cord then will stick as close all around as your skin.

If you get hungry for honey, or want to put on your spectacles, just run your hand up between the rubber cord and your breast, and it will have plenty of room. After the start is made, nature will find your mouth or eyes.

You may raise the objection of surplus material before the eyes. I will say that the top and bottom is on a draw string, and can be gathered at the sides and left clear in the middle. M. B. GOLDEN.

Dunbar, Pa.

Bees Did Fairly Well.

Our main honey harvest has just closed for this locality, and bees have done fairly well. L. DICKERSON.

Denison, Tex., June 29.

Working in the Supers.

I put out 40 colonies of bees in the spring, and have not increased them very much as yet, but they are all working in the supers, and they are doing nicely. The prospects are good. FRED BOTT.

Wabasha, Minn., July 5.

Wintered Well—Getting Honey.

I wintered my bees on the summer stands, and have not lost a colony in three years, or since I commenced bee-keeping. I always have them on the summer stands. I have 20 colonies, and they are all working in the sections at this time. They had commenced swarming on May 1st, but rain set in for three weeks and stopped them, but now they are at work again. A swarm that came out on May 1st, has given me 64 pounds of comb honey, and the parent colony 48 pounds, at this writing; and I get 25 cents per pound for the honey.

JOHN H. BECHTLE.

Reistville, Pa., July 2.

Bees Did Nothing—Sweet Clover.

Bees did nothing up to June, but there is some swarming now. I think they will get winter stores enough. I have 14 colonies, and my surplus was 30 pounds; last year 12 colonies and 300 pounds of honey, and I left plenty for winter stores, and to last them through the cold spring. March, April, June and July are the honey months here. If I had something that would furnish sweets for the bees through May, it would help me in the business. I don't think there is enough nectar gathered to keep up brood-rearing through May sufficient for the honey-flow, which comes about the first of June.

I am much interested in the subject of honey-producing plants, and all other letters published in the good old BEE JOURNAL, which I expect to read as long as I keep bees, or have money or credit.

I have one-half acre in sweet clover. It was sowed on March 26, 1894, but it has been dry for six weeks, though on an average it is knee high. M. W. GARDNER.

Bankston, Ala., June 24.

Having a Flow from Basswood.

We have a honey-flow now from basswood. My spring number of colonies was 21, which I have increased to 40. I do not want any more swarms after this. We generally have a good honey-flow in the fall on the island.

I cannot afford to be without the BEE JOURNAL. F. YAHNKE.

Winona, Minn., June 29.

A Delayed Spring Report.

On April 21st bees were in advance of other years. I took my bees out of the bee-house on March 19th. All seemed to be in good condition, and I left them out nearly a week when it began to get cold, and I put them back into the bee-house. The mercury ranged from 16 to 8 degrees above zero up to March 30th, when it began to warm up, but the wind was raw and cold. On April 7th it began to snow, and some thought it snowed 12 inches or more, but it was thawing all of the time—on April 8th or 9th it nearly all thawed off, and on the 10th it began to snow, and there was no let up to speak of until the morning of the 12th, when the snow was from 24 to 26 inches deep on the level.

I took my bees out the second time on April 17th and 18th, all alive and in good condition. Two colonies out of the 89 were two and three frame nuclei, the frames being the same as in my (hives) 11x16, inside measure. I set those nuclei out in hives, and gave them frames of honey for their winter stores. After they were out a few days, I looked them over, and found five frames in one and seven in the other nearly all covered with bees. I have not had time yet to look my bees all through, only to raise the honey-boards and see that there were plenty of bees. I looked through

a few colonies on April 20th, and found considerable brood (some had drone-brood) in all stages, and some were hatched out. My experience does not coincide with B. Taylor's, on page 500, where he says he thinks they are not going to winter well on account of being all old bees.

The season of 1893, in our section, was the poorest, I think, I ever witnessed, the drouth drying everything up so that there was no honey to speak of in this neighborhood. After June 30th there was but little of the golden-rod that budded out to blossom, and it was the same with the wild aster.

About July 10, 1893, I hived a swarm that filled its hive and 55 one-pound sections with honey, about two-thirds of it being red honey. Last year we had no buck-wheat bloom to speak of, so you may imagine they quit brood-rearing very early in the season. I think that accounts for their starting in breeding in the bee-house. My bees averaged a great deal heavier with bees when I took them out than when put in for winter.

On May 2nd here bees were rolling in the pollen and storing some honey. When putting on some supers a few days ago, I was looking in some of the hives and found plenty of queen-cells under headway, and a good many with eggs in them. I think they will be swarming by the 10th or 15th, if they have no drawback. Apple and raspberry bloom will be right along; cherry and plum are now here, so that I think we are far in advance of last year.

ANDREW M. THOMPSON.

Canaseraga, N. Y., May 2.

Honey-Boards, Supers, Etc.

As there has been so much in print about honey-boards and supers, I am sometimes at a loss to know which one of them deserves the most attention. For me, a honey-board should be as thin as possible, and should be so perforated as to fit the openings in the sections. These honey-boards may be tacked on the super, and the sections placed directly upon them; or, if the super has the patent slats, they should not be thicker than $\frac{1}{8}$ of an inch—yes, 1-16 of an inch would do, if they would not warp too much, and they will not if proper care is taken of them. But why not get the slats made of zinc or tin? then they will not warp nor rot, and will last a lifetime. And how much cheaper they would be in the end than honey-boards and wide frames, and how little room they would take when stored away.

"Now," says one, "I have no use for them, as I use a T super." Very well, but your sections are travel-stained and propolized, and that is an objection to first-class comb honey.

One says, "The patent slats above described are too thin, and will sag in the center." So they would, if you had not already one or two thin wires strung across the center of the super. I use three wires, about the size of broom-wire, one on each

end, and one in the center of the super. Place the super on a table or bench, and put the slats in, then put the sections and separators in, using from two to three or more separators for a wedge-board, according to the space to be filled. Push the wedges down, and the job is finished. You see in this way I have a honey-board on each super. This is a very simple and cheap honey-board and super bottom combined.

The object of these thin honey-boards is to bring the sections as close to the brood-frames as possible, for close observation has proved that the closer the sections are to the brood-nest, the quicker the bees will work in them.

One more thing I would like to call attention to, and that is to allow the bees to get on top of the sections, for this hastens comb building in the sections. Somebody once told me that the bees on top of the sections were loafers, but that is not so, for I have found out differently. If one will take notice, he will find these bees gorged with honey, and many times see the little wax scales on the lower side of their abdomens, as the bees go down the sections. In these supers I produced 300 pounds of as fine honey as I ever saw, and as I think I ever will see, for it was perfect. If I could only get a perfect method of wintering bees in this latitude, then I would be satisfied with bee-keeping.

My bees, up to March 6th, wintered 75 per cent. better than they did the winter before, but not perfectly, for about one peck out of 21 colonies were dead on March 6th. The cause of this I do not know. One colony got the diarrhea, but none of the rest showed any signs of it.

I hope that some of our old veterans will soon give us a method by which bees will winter perfectly, but until then I will keep on practicing, and give my experience.

I am well pleased with the AMERICAN BEE JOURNAL. It is a school to the beginner, and those famous old bee-keepers are its teachers. But around here the bee-keepers think they know all about bee-keeping, and don't need any bee-paper, and most of them had no honey last summer.

Chippewa Falls, Wis. AUGUST BARTZ.

Another New Bee-Hive, Etc.

I have been experimenting for some time to get up a bee-hive to prevent the bees swarming, and to get more honey in the sections. I think that I have the hive completed to prevent the bees swarming, and average more honey per colony than in my old style of hive, which is as good a hive as any except the new hive.

I do not claim that a colony in my new hive will store more honey than any other strong colony that is in a good hive and does not swarm, but I say on an average I can take more surplus honey from the bees in this hive, because I have the control over the bees to prevent their swarming. I also have the control over the bees, so that they must go in any part of the hive

where I want them to go, and if the young queens are successful in returning, I have three queens in each hive when the honey season is over. I have then plenty of queens for re-queening.

I can winter two full colonies with eight combs each in this hive. I have wintered three colonies successfully on the summer stands—two with five combs each, and one with six combs. I have eight entrances in the hive. The hive I have in one chamber before the honey season opens. A few days before the honey season opens I make it into three chambers—one working chamber, and two nursing and hatching chambers. I will give this hive another season's trial before I say more. I will report later how the bees do in this hive this season.

Bees did well this spring. The honey season is just opening, and I am getting my bees ready in the new hives to put on the sections. We have had a great rain storm the past few days; if it continues a few days more, it will be a drawback to the bees, for the flowers are just coming into bloom.

J. F. H.

Mount Joy, Pa., May 21.

Queens and Queen-Rearing.

If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may safely introduce any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearing"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, \$1.00; or clubbed with the BEE JOURNAL for one year—both for only \$1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at \$1.00 each.

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Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of last number of the BEE JOURNAL for description and prices.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

Honey & Beeswax Market Quotations.

ALBANY, N. Y., Mar. 23.—The honey market is very slow now. The demand is about over on comb. Some extracted wanted at 6c.; if dark color, 5c.

Beeswax, 26@27c.

H. R. W.

BUFFALO, N. Y., May 14.—Trade is very slow, and we have still a liberal stock on hand. We quote: Fancy comb, 13@14c.; choice, 11@12c.; dark and common grades, 8@9c. Beeswax, 25@30c.

B. & Co.

CHICAGO, ILL., May 10.—The market for comb honey is not of large volume at this season of the year; a fine article of white comb brings 15c. in pound sections. Extracted slow of sale, at 4@6c. Beeswax, 25c.

R. A. B. & Co.

CHICAGO, ILL., Mar. 24.—The honey market will be very quiet for the balance of the season. We will not do much business until new honey comes in. We cannot quote prices but will obtain the best possible price on what little stock we will sell until early fall. Beeswax is very active at 25@26c.

J. A. L.

CINCINNATI, O., June 19.—Demand is slow for all kinds of honey. The range of prices is 4@6c. for extracted, and 12@14c. for best white comb. There is no sale for dark comb honey at any price.

Beeswax is in fair demand at 23@25c. for good to choice yellow.

C. F. M. & S.

KANSAS CITY, Mo., Apr. 6.—We have had an exceedingly slow trade on honey this season, and prices ruled comparatively low. We quote to-day: No. 1 white comb, 1-lb., 14@15c.; No. 2, 13@14c.; No. 1 amber, 12@13c.; No. 2, 10@11c. Extracted, 5@7c.

Beeswax, 20@22c.

C.-M. C. Co.

NEW YORK, N. Y., May 25.—New crop of Southern honey is arriving freely. The market is well supplied and demand very light. We quote: Common grade, 50c. per gal.; choice, 55@60c. Beeswax is firm at 28c.

H. B. & S.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. Co., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & Co., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central ays